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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 7

Complete if Known

Application Number 09/834,596
Filing Date April 13, 2001
First Named Inventor Watanabe *et al.*
Group Art Unit 1623
Examiner Name Howard V. Owens, Jr.
Attorney Docket Number 08841.105037 PHAR 2020

3372258 3

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear
		Number	Kind Code (if known)			
H/O	AA	3,480,613		Walton <i>et al.</i>	11-25-1969	
	AB	5,977,061		Holy <i>et al.</i>	11-02-1999	
	AC	6,340,690	B1	Bachand <i>et al.</i> (Idenix Pharm.)	01-22-2002	
	AD	6,395,716	B1	Gosselin <i>et al.</i> (Idenix Pharm.)	05-28-2002	
	AE	6,448,652	B1	Gosselin <i>et al.</i>	09-03-2002	
	AF	6,578,248	B2	Ramasamy <i>et al.</i>	06-03-2003	
	AG	2002/0055483	A1	Watanabe <i>et al.</i>	05-09-2002	
	AH	2002/0147160	A1	Bhat <i>et al.</i>	10-10-2002	
	AI	2003/0008841	A1	Devos <i>et al.</i>	01-09-2003	
	AJ	2003/0028013	A1	Wang <i>et al.</i>	02-06-2003	
	AK	2003/0050229	A1	Sommadossi <i>et al.</i> (Idenix Pharm.)	03-13-2003	
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		Office ³	Number	Kind Code ² (if known)				
	AN	FR	1,521,076		Merck & Co. Inc.	04-12-1968		
	AO	FR	1,581,628		Merck & Co. Inc.	09-19-1969		
	AP	FR	2,662,165	A1	Univ Pierre et Marie Curie, Paris	11-22-1991		
H/O	AQ	GB	1,163,103 A		Merck & Co. Inc.	09-04-1969		
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H/O	AU	WO	98/16184	A2	ICN Pharmaceuticals Inc.	04-23-1998		
H/O	AV	WO	99/43691	A1	Emory U./Georgia Res. Found.	09-02-1999		

Examiner Signature

Howard V. Owens, Jr.

Date Considered

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Sheet 2 of 7

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		Office ³	Number	Kind Code ² (if known)				
<i>HO</i>	BA	WO	00/09531	A2	Novirio (Idenix Pharmaceuticals)	02-24-2000		
	BB	WO	01/16671	A1	Novirio (Idenix Pharmaceuticals)	03-08-2001		
	BC	WO	01/32153	A2	Biochem Pharma, Inc.	05-10-2001		
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	BF	WO	01/79246	A2	Pharmasset Ltd.	10-25-2001		
	BG	WO	01/90121	A2	Novirio (Idenix); Univ...Cagliari	11-29-2001		
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	BJ	WO	02/03927	A1	ICN Pharmaceuticals Inc.	01-17-2002		
	BK	WO	02/18404	A2	F. Hoffmann-La Roche AG	03-07-2002		
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	BY	WO	03/062256	A1	Ribapharm Inc.	07-31-2003		
<i>HO</i>	BZ	WO	03/062257	A1	Ribapharm Inc.	07-31-2003		

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**SUPPLEMENTAL
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-Sheet	3	of	7
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Group Art Unit	1623
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		Office ³	Number	Kind Code ² (if known)				
HO	CA	WO	03/063771	A2	Pharmasset Ltd.	08-07-2003		
HO	CB	WO	03/068162	A2	Pharmasset Ltd.	08-21-2003		
HO	CC	WO	03/072757	A2	Biota Inc.	09-04-2003		
HO	CD	WO	03/093290	A2	Genelabs Technologies Inc.	11-13-2003		

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ^o
Ho	CE	ALTMANN, K.H., <i>et al.</i> , "The Synthesis of 1'-methyl carbocyclic thymidine and its effect on nucleic acid duplex stability", <i>Synlett</i> , Thieme Verlag, Stuttgart, De, October 1994, 10, 853-855	
Ho	CF	BAGINSKY, S.G. <i>et al.</i> , "Mechanism of action of a pestivirus antiviral compound," <i>Proc. Nat. Acad. Sci. (USA)</i> 2000, 97(14), 7981-7986.	
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Ho	CH	BEIGELMAN, L.N., <i>et al.</i> , "A general method for synthesis of 3'-C-alkylnucleosides", <i>Nucleic Acids Symp. Ser.</i> , 1981, 9, 116-119.	
Ho	CI	BERENGUER <i>et al.</i> , "Hepatitis B and C Viruses: Molecular Identification and Targeted Antiviral Therapies," <i>Proceedings of the Association of American Physicians</i> , 1998, 110(2), 98-112.	
Ho	CJ	CARROLL, S.S., <i>et al.</i> , "Inhibition of Hepatitis C Virus RNA Replication by 2'-Modified Nucleoside Analogs," <i>The Journal of Biological Chemistry</i> , 2003, 278 (14), 11979-11984.	
Ho	CK	CZERNECKI, S., <i>et al.</i> , "Syntheses of Various 3'-Brached 2',3'-Unsaturated Pyrimidine Nucleosides as Potential Anti-HIV Agents," <i>J. Org. Chem.</i> , 1992, 57, 7325-7328.	
Ho	CL	DeFRANCESCO, R. <i>et al.</i> , "Approaching a new era for hepatitis C virus therapy : inhibitors of the NS3-4A serine protease and the NS5B RNA-dependent RNA polymerase," <i>Antiviral Research</i> , 2003, 58, 1-16.	
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Group Art Unit	1623
Examiner Name	Howard V. Owens, Jr.
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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Ho	DA	FARKAS, J., "Nucleic acids components and their analogues. LXXIX. Synthesis of methyl 1-deoxy-D-psicofuranosides substituted at C(1) with haolo atoms or a mercapto group," <i>Collect. Czech. Chem. Commun.</i> 1966, 31, 1535-1543.	
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	DD	GROUILLER, A., <i>et al.</i> , "Novel p-toluenesulfonylation and thionocarbonylation of unprotected thymine nucleosides," <i>Synlett</i> , 1993, 221-222.	
	DE	HARAGUCHI, K., <i>et al.</i> , "Preparation and reactions of 2'- and 3'- vinyl bromides of uracil-nucleosides: versatile synthons for anti-HIV agents," <i>Tetrahedron Letters</i> , 1991, 32(28), 3391-3394.	
	DF	HARAGUCHI, K., <i>et al.</i> , "Stereoselective synthesis of 1'-C-branched uracil nucleosides from uridine, <i>Nucleosides & Nucleotides</i> , 1995, 14, 417-420.	
	DG	HARRY-O'KURU, <i>et al.</i> , "A short, flexible route toward 2'-C-branched ribonucleosides," <i>J. Org. Chem.</i> 1997, 62, 1754-1759	
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	DI	HATTORI, H., <i>et al.</i> , "Nucleosides and Nucleotides. 175. Structural requirements of the suga moiety for the antitumor activities of new nucleoside antimetabolites, 1-(3-C-ethynyl-β-D-ribo-pentofuranosyl)cytosine and -uracil," <i>J. Med. Chem.</i> , 1998, 41, 2892-2902.	
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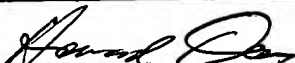
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HO	EA	KAWANA, M., <i>et al.</i> , "The deoxygenation of tosylated adenosine derivatives with Grignard reagents," <i>Nucleic Acids Symp. Ser.</i> , 1986, 17, 37-40.	
	EB	LAVAIRE, S., <i>et al.</i> , "3'-deoxy-3'-trifluoromethyl nucleosides : synthesis and antiviral evaluation," <i>Nucleosides & Nucleotides</i> , 1998, 17, 2267-2280.	
	EC	LEYSEN, P. <i>et al.</i> , "Perspectives for the treatment of infections with Flaviviridae", <i>Clinical Microbiology Reviews</i> , Washington, D.C., (January 2000), 13(1), 67-82.	
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	EF	MATSUDA, A., <i>et al.</i> , "Nucleosides and Nucleotides. 94. Radical deoxygenation of <i>tert</i> -alcohols in 1-(2-C-alkylpentofuranosyl)pyrimidines : Synthesis of (2'S)-2'-deoxy-2'-C-methylcytidine, an antileukemic nucleoside," <i>J. Med. Chem.</i> , 1991, 34, 234-239.	
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	EI	MIKHAILOV, S.N., <i>et al.</i> , "Synthesis and properties of 3'-C-methylnucleosides and their phosphoric esters," <i>Carbohydrate Research</i> , 1983, 124, 75-96.	
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HO	EL	NUTT, R.F., <i>et al.</i> , "Branched-chain sugar nucleosides. III. 3'-C-methyladenine," <i>J. Org. Chem.</i> 1968, 33, 1789-1795.	

Examiner Signature		Date Considered	5-13-05
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	⁴
to	FA	OIVANEN, M., <i>et al.</i> , "Additional evidence for the exceptional mechanism of the acid-catalysed hydrolysis of 4-oxopyrimidine nucleosides: hydrolysis of 1-(1-alkoxyalkyl)uracils. Seconucleosides. 3'-C-alkyl nucleosides and nucleosides 3',5'-cyclic monophosphates," <i>J. Chem. Soc. Perkin Trans.</i> , 1994, 2, 309-314.	
	FB	ONG, S.P., <i>et al.</i> , "Synthesis of 3'-C-methyl adenosine and 3'-C-methyluridine diphosphates and their interaction with the ribonucleoside diphosphate reductase from <i>Corynebacterium nephridii</i> ," <i>Biochemistry</i> , 1992, 31, 11210-11215.	
	FC	PAN-ZHOU X-R., <i>et al.</i> , "Differential effects of antiretroviral nucleoside analogs on mitochondrial function in HepG2 cells," <i>Antimicrob Agents Chemother</i> 2000; 44(no.3), 496-503.	
	FD	ROSENTHAL, A., <i>et al.</i> , "Branched-chain sugar nucleosides. Synthesis of 3'-C-ethyl (and 3'-C-butyl)uridine," <i>Carbohydrate Research</i> , 1980, 79, 235-242.	
	FE	SAMANO, V., <i>et al.</i> , "Nucleic acid related compounds. 77. 2',3'-didehydro-2',3'-dideoxy-2'(and 3')-methyl nucleosides via [3,3]-sigmatropic rearrangements of 2'(and 3')-methylene-3'(and 2')-O-thiocarbonyl derivatives and radical reduction of a 2'-chloro-3'-methylene analogue," <i>Can. J. Chem.</i> , 1993, 71, 186-191.	
	FF	SAMANO, V., <i>et al.</i> , "Synthesis and radical-induced ring-opening reactions of 2'-deoxyadenosine-2'-spirocyclopropane and its uridine analogs. Mechanistic probes for ribonucleotide reductases," <i>J. Am. Chem. Soc.</i> , 1992, 114, 4007-4008.	
	FG	SCHMIT, C. <i>et al.</i> , "The effects of 2'- and 3'-alkyl substituents on oligonucleotide hybridization and stability," <i>Biorganic & Medicinal Chemistry Letters</i> , 1994, 4(No.16), 1969-1974.	
	FH	SERAFINOWSKI, P.J., <i>et al.</i> , "New method for the preparation of some 2'- and 3'-trifluoromethyl-2'-3'-dideoxyuridine derivatives," <i>Tetrahedron</i> , 1999, 56(No. 2), 333-339.	
	FI	SHARMA, P.K., <i>et al.</i> , "Synthesis of 3'-trifluoromethyl nucleosides as potential antiviral agents," <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2000, 19(No. 4), 757-774.	
	FJ	SOMMADOSSI J-P., <i>et al.</i> , "Comparison of cytotoxicity of the (-) and (+)-enantiomer of 2',3'-dideoxy-3'-thiacytidine in normal human bone marrow progenitor cells," <i>Biochemical Pharmacology</i> , 1992; 44:1921-1925.	
	FK	SOMMADOSSI J-P., <i>et al.</i> , "Toxicity of 3'-azido-3'-deoxythymidine and 9-(1,3-dihydroxy-2-propoxymethyl)guanine for normal human hematopoietic progenitor cells in vitro," <i>Antimicrobial Agents and Chemotherapy</i> , 1987, 31(No. 3), 452-454.	
to	FL	TRITSCH, D., <i>et al.</i> , "3'-β-ethynyl and 2'-deoxy-3'-β-ethynyl adenosines: first 3'-β-branched-adenosines substrates of adenosine deaminase," <i>Biorganic & Medicinal Chemistry Letters</i> , 2000, 10, 139-141.	

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Complete if Known

Application Number	09/834,596
Filing Date	April 13, 2001
First Named Inventor	Watanabe <i>et al.</i>
Group Art Unit	1623
Examiner Name	Howard V. Owens, Jr.
Attorney Docket Number	08841.105037 PHAR 2020

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